

AMENDED CLAIMS

[Received by the International Bureau on 16 December 2003 (16.12.03) original claims 1, 3 and 4 amended; original claims 5-17 cancelled; new claims 5-11 added l

- 1. A method for hydroisomerizing a waxy feed to produce improved yield of a lube basestock which comprises:
 - (a) contacting the waxy feed under hydroisomerization conditions with a catalyst comprising a unitized mixed powdered pellet catalyst, said catalyst comprising:
 - (i) at least one first component selected from 8, 10 and 12 ring molecular sieves, and mixtures thereof, having a metal hydrogenation component dispersed thereon;
 - (ii) at least one second component selected from 8, 10 and 12 ring molecular sieves, and mixtures thereof, having a metal hydrogenation component dispersed thereon; and
 - (iii) wherein said first and second components are present in a ratio such that when evaluated in the conversion of methyl cyclohexane at 320°C to 1,1-dimethylcyclopentane, 1,2-dimethylcyclopentane and ethylcyclopentane, 1,3-dimethylcyclopentane and ethylcyclopentane, the catalyst will provide a trans-1,2-/trans-1,3-dimethylcyclopentane ratio in the range of less than about 1 and a selectivity to ethylcyclopentane, at 10% conversion, of at least about 50%.
- 2. The method of claim 1 wherein the dewaxing component is at least one of a 10 ring and 12 ring molecular sieve.
- 3. The method of claim 1 wherein the 10 and 12 ring molecular sieves are selected from alumino silicates and alumino phosphates.



- 4. The method of claim 3 wherein the alumino silicates are selected from ZSM-5, ZSM-11, ZSM-12, ZSM-22, ZSM-23, ZSM-35, natural and synthetic ferrierites, ZSM-48, ZSM-57, SSZ-31, Beta, Mordenite, Offretite, ECR-42, MCM-71, and ITQ-13.
- 5. The method of claim 4 wherein said at least one first component is ITQ-13 and said at least one second component is selected from ZSM-48, ZSM-35, ZSM-22, ZSM-23, ZSM-57, SSZ-31, and mixtures thereof.
- 6. The method according to claim 4 wherein said at least one first component is selected from ITQ-13, ZSM-57, and mixtures thereof, and said at least one second component is selected from ZSM-22, ZSM-23, ZSM-35, ZSM-48, SSZ-31, and mixtures thereof.
- 7. The method according to claim 1 wherein said first and second components are present in a ratio such that when evaluated in the conversion of methyl cyclohexane at 320°C to 1,1-dimethylcyclopentane, 1,2-dimethylcyclopentane, 1,3-dimethylcyclopentane and ethylcyclopentane, the catalyst will provide a trans-1,2-/trans-1,3-dimethylcyclopentane ratio in the range of less at least 1 and a selectivity to ethylcyclopentane, at 10% conversion, of at least about 50%.
- 8. The method of claim 1 wherein the hydrogenation component is a Group VIII metal.
- 9. The method of claim 8 wherein the hydrogenation component is selected from Pt, Pd, and mixtures thereof.
- 10. The method of claim 8 wherein the hydrogenation component is dispersed in an amount ranging from about 0.1 wt.% to about 30 wt. %.

11. The method of claim 1 wherein the feed is a feed that is solvent dewaxed to a pour point of up to $\pm 10^{\circ}$ C.